



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/242,525	02/17/1999	SHINICHI SATO	11301-1480	1170

7590

04/12/2005

GEORGE M THOMAS
THOMAS KAYDEN HORSTEMEYER & RISLEY
100 GALLERIA PARKWAY NW
SUITE 1500
ATLANTA, GA 303395948

EXAMINER

SERGEANT, RABON A

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/242,525

Applicant(s)

SATO ET AL.

Examiner

Rabon Sergeant

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46, 48 and 63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46 is/are rejected.
- 7) ☒ Claim(s) 48 and 63 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Art Unit: 1711

1. The Notice of Allowability of January 5, 2005 has been vacated. Prosecution on the merits has been reopened in view of the necessity of rejecting claim 46 over Barron et al. ('844).

It is regretted that this issue has not been set forth earlier in prosecution.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 46 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Barron et al. ('844).

Barron et al. disclose the production of a polyurethane wherein an isocyanate terminated prepolymer is reacted with an aminosilane intermediate. See column 3, lines 37-49. The

Art Unit: 1711

disclosed isocyanate terminated prepolymer is derived from the reaction of a polyisocyanate, which corresponds to applicants' compound (d), with a polyol, which corresponds to applicants' compound (c). See column 2, line 61 through column 3, line 24. Furthermore, based upon the isocyanate equivalent weight of the prepolymers disclosed within examples 1 and 8, the position is taken that the disclosed prepolymers possess an isocyanate content within applicants' claimed range. The disclosed aminosilane intermediate is derived from the reaction of an aminoalkylalkoxysilane, which corresponds to applicants' compound (a), with an acrylate, which corresponds to applicants' compound (b). See column 3, lines 50-56 and formula (a) within column 2.

4. Patentees disclose at column 2, line 67 through column 3, line 2 that at least about 1% of the isocyanate terminations of the prepolymer are reacted with the aminosilane intermediate. The position is taken that this disclosure encompasses and anticipates applicants' isocyanate index set forth within the last two lines of claim 46. However, if it is determined that this disclosure fails to be anticipatory, then the position is alternatively taken that the disclosure renders applicants' isocyanate index *prima facie* obvious. In view of the disclosure, one of ordinary skill would have reasonably expected that viable polyurethanes would result at any index range that satisfies the requirement that at least about 1% of the isocyanate terminations are reacted with the intermediate; therefore, one would have been motivated to operate at any index range that satisfies the aforementioned requirement.

5. Claims 48 and 63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1711

With respect to claim 48, the claim requires that compound (a) possess two primary amino groups, or two secondary amino groups, or one primary amino group and one secondary amino group. Barron et al. fail to disclose or render obvious the use of such a compound having at least two functional amino groups.

With respect to claim 63, Barron et al. fail to disclose or render obvious the use of a compound that corresponds to applicants' compound (a).

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.


RABON SERGENT
PRIMARY EXAMINER

R. Sergent
April 6, 2005